

**Remarks**

The non-final Office Action dated April 29, 2009, lists the following new grounds of rejection: claims 1-25 stand rejected under 35 U.S.C. § 112(2); and claims 1-25 stand rejected under 35 U.S.C. § 102(e) over O'Brien (U.S. Patent No. 6,886,110). In this discussion set forth below, Applicant does not acquiesce to any rejection or averment in the instant Office Action unless Applicant expressly indicates otherwise.

Applicant respectfully traverses the § 102(e) rejection of claims 1-25 because the '110 reference does not correspond to aspects of the claimed invention directed to a plurality of control circuits each of which is associated with one of the modules and each of which is arranged to control whether a global enable signal is passed to the module associated with the control circuit. The '110 reference does not teach that there is any circuit that controls whether the signal on TMS line 100 (*i.e.*, the asserted global enable signal) is passed to devices 30, 30' and 30" (*i.e.*, the asserted modules). *See, e.g.*, Figures 3 and 4. As acknowledged by the Examiner, the TAP controllers 86 (*i.e.*, the asserted modules) are embedded in each of the devices 30, 30' and 30", and thus the TAP controllers 86 do not control whether the signal on TMS line 100 is passed to the devices 30, 30' and 30". In fact, the '110 reference teaches that the values on TMS line 100 are always provided to each of the devices 30, 30' and 30", with the TAP controllers 86 each interpreting any sequence of values on TMS line 100 in the same way. *See, e.g.*, Col. 6:21-50. Applicant notes that the Examiner fails to even address aspects of the claimed invention directed to the control circuits being arranged to control whether a global enable signal is passed to the module associated with the control circuit, as no assertion of correspondence to these aspects is presented in the instant Office Action. Accordingly, the § 102(e) rejection of claims 1-25 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 102(e) rejection of dependent claims 2-12 and 14-25 because the Examiner fails to assert correspondence between the '110 reference and any aspect of these claims in the instant Office Action. Specifically, the entire rejection of claims 2-12 and 14-25 consists of discussion of the teaching of the '110 reference, without providing any explanation regarding how these teachings allegedly

correspond to the limitations of claims 2-12 and 14-25. Applicant notes that the rejection of claims 2-12 and 14-25 does not even contain a single reference to any limitation of these claims. In particular, the Examiner fails to address aspects of the claimed invention directed to each of the modules of the cascade being configured to operate in either a transport mode or a test mode, with each of the modes using the single data path that passes through each module of the cascade (*see, e.g.*, claim 2). The '110 reference teaches that in the bypass mode a bypass register 90 is connected between TDI 48 and TDO 50 of device 30, and that in the Exttest mode the boundary-scan resistors 84 are connected between TDI 48 and TDO 50 of devices 30' and 30". *See, e.g.*, Figure 3 and Col. 6:21-50. Thus, the '110 reference teaches using a different path through each of the devices 30, 30' and 30" depending upon the mode of the device, instead of each of the modes using the single data path as claimed. Accordingly, the § 102(e) rejection of claims 2-12 and 14-25 is improper and Applicant requests that it be withdrawn. Should any rejection based on the '110 reference be maintained, or should any new rejection be presented, Applicant respectfully requests that the Examiner either address the specific limitations of Applicant's dependent claims or else indicate that these claims are allowable.

Applicant respectfully traverses the § 112(2) rejection of claims 1-25 because the claims do particularity point out and distinctly claim the subject matter which Applicant regards as the invention. Notwithstanding, in an effort to facilitate prosecution, Applicant has amended the claims as indicated above. Thus, Applicant requests that the § 112(2) rejection be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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